

Amendments to the Claims

1. (Currently Amended) A method of controlling a lighting device comprising the steps of:

supplying pulse trains during normal operation, the pulse trains having characteristics to determine the intensity of the lighting device; and

causing the pulse trains to be:

blocked in response to an overload condition, and

modified if said overload condition persists;

wherein said blocking is done for a defined time interval while the pulse trains continue to be supplied, and said modification is done if the overload condition persists after a defined number of blocking cycles have been executed.

2. (Original) The method of claim 1 where said blocking is done in hardware, and said modification is accomplished in software.

3. (Cancelled)

4. (Currently Amended) The method of claim ~~3~~ 1 where said defined time interval is one switching cycle of the driving pulses.

5. (Currently Amended) The method of claim 3 1 where the modification comprises at least one of pulse width modification, frequency shift control, or shut down.
6. (Original) The method of claim 4 where the modification comprises at least one of pulse width modification, frequency shift control, or shut down.
7. (Original) The method of claim 5 where the modification comprises at least one of pulse width modification, frequency shift control, or shut down.
8. (Original) The method of claim 6 where the blocking is accomplished using logic gates.
9. (Original) The method of claim 7 where the blocking is accomplished using logic gates.
10. (Original) The method of claim 5 where the blocked signals are DC voltages, and the lamp driving pulses are AC voltages.
11. (Currently Amended) A method of providing fault protection to a circuit comprising:
filtering transient from nontransient fault conditions;
fully protecting the circuit during the transient fault conditions by immediately

blocking the driving signals from the load, while continuing to supply the driving signals;

and

modifying circuit output in the event of a nontransient fault condition;

12. (Cancelled).

13. (Cancelled).

14. (Cancelled).

15. (Currently Amended) The method of claim ~~14~~ 11 where modifying circuit output comprises a least one of : pulse width modification, frequency shift control, or shut down.

16. (Currently Amended) The method of claim ~~12~~ 11 further comprising an insignificant or imperceptible effect on the load performance during said transient fault condition protection.

17. (Cancelled).

18. (Currently Amended) Apparatus for providing fault protection to a lighting device, the apparatus comprising:

a controller which blocks the light driving signals in response to a fault condition, while the light driving signals continue to be supplied, and modifies said driving signals if said condition persists.

19. (Original) The apparatus of claim 18 further comprising hardware arranged to cause said blocking upon the detection of a fault condition.

20. (Original) The apparatus of claim 19 where said hardware comprises logic gates.

21. (Currently Amended) A circuit for controlling a lighting device comprising:

a pulse generator for generating at least one pulse train having parameters indicative of a power level at which said lighting device should operate;

at least one logic gate to block said pulse train upon hardware detection of a specified fault condition while the pulse train continues to be generated; and

a microprocessor for executing software that causes said pulse generator to operate in accordance with user control to set the parameters of said pulse train if said fault condition persists.

22. (Original) The circuit of claim 21, where said blocking of said pulse train comprises

blocking the driving signals to the pulse generator.

23. (Original) The circuit of claim 22, where said driving signals to the pulse generator comprise DC voltages, and the pulse generator outputs an AC voltage.

24. (Original) The circuit of claim 22 where the blocking of the pulse train is for a user defined short time interval.

25. (New) A method of controlling a lighting device comprising the steps of:

supplying pulse trains during normal operation, the pulse trains having characteristics to determine the intensity of the lighting device; and

causing the pulse trains to be:

blocked in response to an overload condition, and

modified if said overload condition persists;

wherein said blocking is done in hardware, and said modification is accomplished in software, and wherein said blocking is done for one switching cycle of the driving pulses, and said modification is done if the overload condition persists after a defined number of blocking cycles have been executed.

26. (New) The method of claim 25 where the modification comprises at least one of pulse width modification, frequency shift control, or shut down.

27. (New) The method of claim 26 where the blocking is accomplished using logic gates.